



# Monthly Wholesale Trade

## Sales and Inventories

U.S. Department of Commerce  
Economics and Statistics Administration  
BUREAU OF THE CENSUS

**January 1997**

BW/97-01

Issued March 1997

**INTENTION TO REVISE WHOLESALE ESTIMATES.** The unadjusted and adjusted merchant wholesale sales, inventories, and inventories/sales ratio estimates will be revised utilizing the results of the 1995 Annual Trade Survey. Revised sales and inventories/sales ratios for January 1994 through February 1997 and inventories for January 1995 through February 1997 are scheduled for release on May 6.

**Sales.** January 1997 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$205.8 billion, up 1.0 percent (+/-1.1%) from the revised December level and 6.8 percent (+/-1.9%) above January 1996. The December preliminary estimate was revised downward by \$0.5 billion or 0.2 percent. January sales of durable goods increased 0.5 percent (+/-2.2%) from December and were 5.1 percent (+/-2.3%) above January 1996. Sales of electrical goods were up 3.8 percent from last month to \$14.7 billion. Sales of nondurable goods increased 1.4 percent (+/-1.0%) from December and were 8.7 percent (+/-2.6%) above January 1996. Sales of farm-product raw materials were down 7.1 percent from last month to \$9.8 billion, while groceries and related products increased 2.5 percent from December to \$26.2 billion.

**Inventories.** Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$260.8 billion at the end of January, up 1.0 percent (+/-0.4%) from the revised December level and 1.8 percent (+/-1.5%) above January 1996. The December preliminary estimate was revised upward by \$1.8 billion or 0.7 percent. End-of-month inventories of durable goods wholesalers increased 0.8 percent (+/-0.4%) from last month

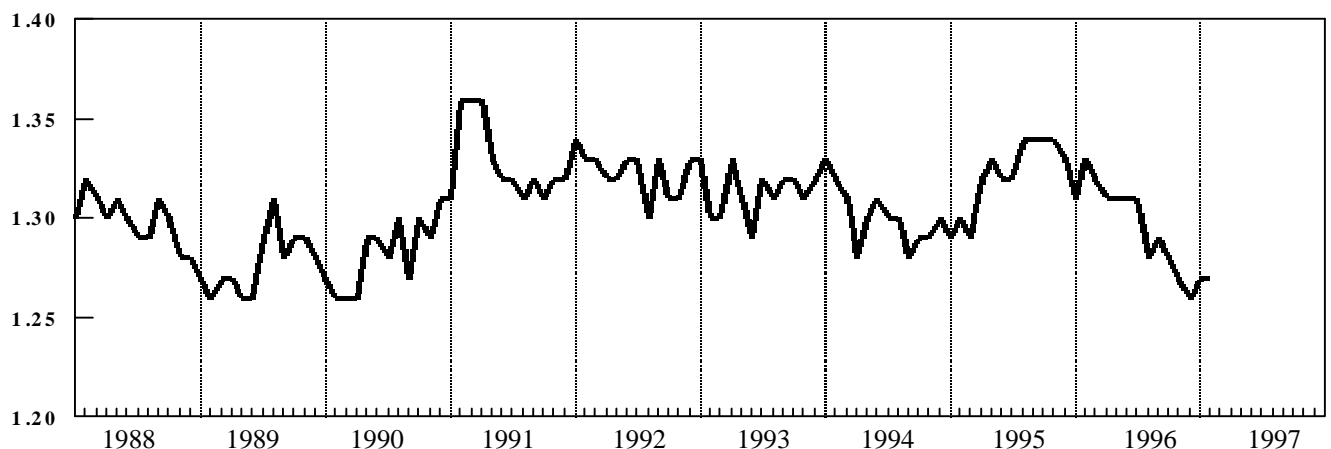
and were 1.1 percent (+/-2.1%) above January 1996. Compared to last month, inventories of motor vehicles and automotive equipment increased 3.7 percent to \$27.7 billion, while professional, commercial equipment and supplies declined 1.6 percent to \$22.2 billion. End-of-month inventories of nondurable goods wholesalers were up 1.5 percent (+/-0.8%) from December 1996 and increased 3.0 percent (+/-2.2%) from last year. Compared to last month, inventories of drugs, drug proprietaries and druggists' sundries increased 3.1 percent to \$15.0 billion, while petroleum and petroleum products decreased 1.2 percent to \$5.7 billion.

**Inventories/Sales Ratio.** The January inventories/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.27. The January 1996 ratio was 1.33.

*Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling variability. A discussion of the reliability of the data and general survey methodology appears in BW/95-RV Current Business Report.*

### Monthly Inventories/Sales Ratios of Merchant Wholesalers: 1988 to 1997

(Data adjusted for seasonal, and trading-day differences, but not for price changes)



Monthly Wholesale Trade for February is scheduled to be released April 8, 1997 at 10:00 a.m.

Address inquiries concerning this report to Services Division, Bureau of the Census, Washington, DC 20233, or call Ronald Piencykoski, (301) 457-2779 or 457-2764. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

This report is available on day of issue through the Department of Commerce's online Economic Bulletin Board (202-482-1986). The data are also available on the internet - <http://www.census.gov/svsd/www/mwts.html>.

Table 1. Estimated Monthly Sales, Inventories, and Inventories/Sales Ratios of Merchant Wholesalers: 1997 and 1996

[In millions of dollars]

SIC <sup>1</sup> code	Kind of business	Sales						Inventories						Inventories/Sales		
		Monthly			Percent change			Monthly			Percent change			ratios		
		Jan. 1997 (P)	Dec. 1996 (r)	Jan. 1996 (r)	Jan./ Dec.	Dec./ Nov.	Jan. 97 Jan. 96	Jan. 1997 (P)	Dec. 1996 (r)	Jan. 1996 (r)	Jan./ Dec.	Dec./ Nov.	Jan. 97 Jan. 96	Jan. 1997 (P)	Dec. 1996 (r)	Jan. 1996 (r)
Adjusted <sup>2</sup>																
	U.S. Total	205,790	203,835	192,681	1.0	0.0	6.8	260,801	258,106	256,185	1.0	0.1	1.8	1.27	1.27	1.33
50	Durable	104,759	104,236	99,713	0.5	-0.3	5.1	164,643	163,333	162,869	0.8	-0.1	1.1	1.57	1.57	1.63
501	Automotive	17,509	17,639	17,278	-0.7	3.5	1.3	27,713	26,731	27,520	3.7	-3.1	0.7	1.58	1.52	1.59
502	Furniture	3,581	3,558	3,252	0.6	0.0	10.1	5,333	5,168	4,945	3.2	0.0	7.8	1.49	1.45	1.52
503	Lumber	7,170	7,029	6,343	2.0	-0.8	13.0	8,049	7,895	7,558	2.0	-1.3	6.5	1.12	1.12	1.19
504	Prof. equip.	19,029	19,388	17,113	-1.9	-1.8	11.2	22,219	22,584	22,956	-1.6	-0.2	-3.2	1.17	1.16	1.34
505	Metals	8,476	8,385	8,202	1.1	-1.8	3.3	12,974	12,787	12,720	1.5	0.9	2.0	1.53	1.52	1.55
506	Electrical	14,729	14,186	14,956	3.8	-3.1	-1.5	23,254	23,103	23,998	0.7	-0.1	-3.1	1.58	1.63	1.60
507	Hardware	6,240	6,099	5,850	2.3	-2.2	6.7	12,284	12,193	11,214	0.7	1.5	9.5	1.97	2.00	1.92
508	Machinery	15,775	15,636	15,319	0.9	-0.4	3.0	36,172	36,146	35,311	0.1	1.1	2.4	2.29	2.31	2.31
509	Other Durable	12,250	12,316	11,400	-0.5	2.3	7.5	16,645	16,726	16,647	-0.5	1.0	0.0	1.36	1.36	1.46
51	Non-durable	101,031	99,599	92,968	1.4	0.2	8.7	96,158	94,773	93,316	1.5	0.3	3.0	0.95	0.95	1.00
511	Paper	7,263	7,076	6,633	2.6	2.1	9.5	9,066	8,972	8,523	1.0	1.0	6.4	1.25	1.27	1.28
512	Drugs	8,887	8,816	8,055	0.8	1.5	10.3	15,046	14,600	12,943	3.1	2.1	16.2	1.69	1.66	1.61
513	Apparel	7,573	6,957	5,717	8.9	7.8	32.5	12,093	11,845	12,005	2.1	6.0	0.7	1.60	1.70	2.10
514	Groceries	26,188	25,548	25,532	2.5	-1.3	2.6	17,262	17,257	16,544	0.0	-0.6	4.3	0.66	0.68	0.65
515	Farm-products	9,846	10,599	10,349	-7.1	-2.6	-4.9	9,190	9,229	11,959	-0.4	-3.5	-23.2	0.93	0.87	1.16
516	Chemicals	4,318	4,264	4,067	1.3	-2.4	6.2	4,801	4,816	4,646	-0.3	-4.7	3.3	1.11	1.13	1.14
517	Petroleum	17,509	17,223	13,838	1.7	1.8	26.5	5,728	5,795	5,085	-1.2	4.4	12.6	0.33	0.34	0.37
518	Alcohol	4,574	4,570	4,666	0.1	-1.4	-2.0	4,811	4,807	4,566	0.1	-2.3	5.4	1.05	1.05	0.98
519	Other Non-dur.	14,873	14,546	14,111	2.2	-0.6	5.4	18,161	17,452	17,045	4.1	-1.0	6.5	1.22	1.20	1.21
Not Adjusted														Sales to date		
														1997	1996	
	U.S. Total	198,438	201,471	186,013	-1.5	1.3	6.7	265,890	258,754	261,964	2.8	-0.5	1.5	198,438	186,013	
50	Durable	98,175	102,499	93,859	-4.2	0.2	4.6	164,588	161,366	162,855	2.0	-0.9	1.1	98,175	93,859	
501	Automotive	15,951	17,551	15,844	-9.1	4.8	0.7	28,156	26,143	27,960	7.7	-6.9	0.7	15,951	15,844	
502	Furniture	3,201	3,458	2,904	-7.4	-4.2	10.2	5,221	5,018	4,846	4.0	-1.8	7.7	3,201	2,904	
503	Lumber	6,288	6,038	5,620	4.1	-11.7	11.9	8,033	7,784	7,550	3.2	1.0	6.4	6,288	5,620	
504	Prof. equip.	18,953	20,338	16,908	-6.8	7.5	12.1	22,575	22,810	23,323	-1.0	0.4	-3.2	18,953	16,908	
505	Metals	8,391	7,689	8,161	9.1	-2.1	2.8	13,130	12,979	12,873	1.2	5.4	2.0	8,391	8,161	
506	Electrical	13,963	13,619	14,208	2.5	-6.7	-1.7	23,207	22,687	23,926	2.3	-1.1	-3.0	13,963	14,208	
507	Hardware	5,610	5,739	5,294	-2.2	-6.8	6.0	12,038	12,083	11,001	-0.4	1.9	9.4	5,610	5,294	
508	Machinery	14,781	15,542	14,660	-4.9	6.2	0.8	35,883	35,604	35,029	0.8	0.2	2.4	14,781	14,660	
509	Other Durable	11,037	12,525	10,260	-11.9	-2.7	7.6	16,345	16,258	16,347	0.5	-1.6	0.0	11,037	10,260	
51	Non-durable	100,263	98,972	92,154	1.3	2.4	8.8	101,302	97,388	99,109	4.0	0.1	2.2	100,263	92,154	
511	Paper	7,495	7,005	6,825	7.0	5.0	9.8	9,302	9,169	8,745	1.5	1.4	6.4	7,495	6,825	
512	Drugs	9,482	9,107	8,667	4.1	6.7	9.4	16,174	14,994	13,940	7.9	3.8	16.0	9,482	8,667	
513	Apparel	6,967	5,552	5,208	25.5	-10.3	33.8	12,625	12,023	12,521	5.0	11.5	0.8	6,967	5,208	
514	Groceries	26,136	25,676	25,455	1.8	-0.8	2.7	17,366	17,602	16,643	-1.3	-2.0	4.3	26,136	25,455	
515	Farm-products	11,096	11,182	11,632	-0.8	5.3	-4.6	11,984	11,306	15,594	6.0	-2.5	-23.1	11,096	11,632	
516	Chemicals	4,240	3,940	4,018	7.6	-4.2	5.5	4,710	4,777	4,562	-1.4	-3.2	3.2	4,240	4,018	
517	Petroleum	17,947	17,447	14,170	2.9	5.3	26.7	5,528	5,917	4,907	-6.6	4.8	12.7	17,947	14,170	
518	Alcohol	3,737	5,041	3,733	-25.9	5.0	0.1	4,508	4,427	4,283	1.8	-15.9	5.3	3,737	3,733	
519	Other Non-dur.	13,163	14,022	12,446	-6.1	5.7	5.8	19,105	17,173	17,914	11.3	-2.6	6.6	13,163	12,446	

p Preliminary estimate. r Revised.

1 For a full description of the SIC Codes shown above see the "1987 Standard Industrial Classification Manual" or the Current Business Reports

"Combined Annual and Revised Monthly Wholesale Trade" publication.

2 Data adjusted for seasonal variations and, in the case of sales, also for trading-day differences. See Table 3 for seasonal adjustment factors used.

**Table 2. Coefficients of Variation and Standard Error for Sales and Inventories**

SIC code	Kind of business	Coefficients of variation for level (x 100)				Standard error for trend				Coefficients of variation for level (x 100)		Standard error for trend
		Preliminary estimates		Final estimates		Ratio of two consecutive months		Year to Year Estimates		Cumulative sales estimates		Current year cumulative to previous year cumulative
		Sales	Inv	Sales	Inv	Sales	Inv	Sales	Inv	CY	PY	
		Median	Median	Median	Median	Median	Median	Median	Median			
	<b>U.S. Total</b>	<b>1.5</b>	<b>1.9</b>	<b>1.5</b>	<b>1.9</b>	<b>0.5</b>	<b>0.3</b>	<b>1.0</b>	<b>1.0</b>	<b>1.6</b>	<b>1.2</b>	<b>1.1</b>
<b>50</b>	<b>Durable</b>	<b>2.3</b>	<b>2.8</b>	<b>2.2</b>	<b>2.7</b>	<b>0.7</b>	<b>0.3</b>	<b>1.4</b>	<b>1.4</b>	<b>2.0</b>	<b>1.9</b>	<b>1.4</b>
501	Automotive	2.9	5.4	3.1	5.2	1.9	0.8	2.7	3.0	2.8	3.5	2.7
502	Furniture	12.2	11.5	12.5	10.7	2.8	0.9	4.4	3.7	12.2	11.0	5.1
503	Lumber	3.9	4.7	4.0	4.9	1.3	0.5	3.1	2.3	4.2	4.7	3.1
504	Prof. equip.	7.5	5.6	7.0	5.5	1.9	0.8	4.1	4.1	6.7	6.7	4.8
505	Metals	4.2	5.6	4.0	5.7	1.3	0.6	3.1	3.8	4.1	4.0	2.3
506	Electrical	4.5	4.4	4.4	4.3	1.6	0.5	3.2	2.0	4.0	4.5	4.2
507	Hardware	4.6	5.3	4.2	5.2	2.0	0.7	3.3	3.1	4.9	4.7	3.8
508	Machinery	4.5	5.4	4.4	5.3	1.7	0.6	5.0	3.1	4.4	4.8	3.5
509	Other Durable	5.1	4.9	4.9	4.7	3.3	1.0	4.6	3.4	4.9	5.5	4.8
<b>51</b>	<b>Nondurable</b>	<b>2.3</b>	<b>2.3</b>	<b>2.3</b>	<b>2.3</b>	<b>0.5</b>	<b>0.5</b>	<b>1.3</b>	<b>1.3</b>	<b>2.7</b>	<b>1.9</b>	<b>1.6</b>
511	Paper	5.3	5.3	5.2	5.2	1.2	1.2	2.4	2.4	5.1	4.4	2.1
512	Drugs	8.0	8.0	7.8	7.8	1.5	1.5	3.2	3.2	8.3	7.4	3.0
513	Apparel	6.6	6.6	5.7	5.7	2.8	2.8	7.0	7.0	7.8	5.6	8.5
514	Groceries	4.0	4.0	3.9	3.9	1.3	1.3	2.2	2.2	4.1	3.6	1.2
515	Farm-products	4.4	4.4	4.0	4.0	1.9	1.9	3.9	3.9	3.6	4.5	3.9
516	Chemicals	5.8	5.8	5.4	5.4	2.1	2.1	5.6	5.6	6.0	6.4	5.6
517	Petroleum	8.3	8.3	8.4	8.4	0.9	0.9	3.0	3.0	9.5	7.0	4.3
518	Alcohol	6.2	6.2	6.5	6.5	2.8	2.8	2.5	2.5	6.6	6.7	2.7
519	Other Nondur.	6.9	6.9	6.1	6.1	1.8	1.8	3.6	3.6	6.8	6.2	3.9

Note: The median measures of variability are based on the most recent 6 months of data.

### Sample Design and Reliability of Data

There are two types of errors possible in an estimate based on a sample survey: sampling and nonsampling.

Sampling errors occur because observations are made on a sample, not on the entire population, and different samples could have led to different estimates. Standard errors and coefficients of variation, as calculated for this report, are measures of sampling variation. The margin of sampling error, as used on page 1, gives a range about the estimate which is a 90% confidence interval. If, for example, the trend estimate is up 1.2% and the standard error is 0.9%, then the margin of sampling error is  $\pm 1.65 \times 0.9\%$  or  $\pm 1.5\%$ , and the 90% confidence interval is  $-0.3\%$  to  $+2.7\%$ . If the interval contains 0, it cannot be stated with certainty whether there was an increase or decrease. For monthly level, the coefficient of variation (CV) is given. The resulting confidence interval is the estimated value  $\pm 1.65 \times CV \times$  (the estimated value).

Nonsampling errors are usually attributed to many possible sources: (1) coverage error - failure to accurately represent all population units in the sample, (2) inability to obtain

information about all sample cases, (3) response errors, possibly due to definitional difficulties or misreporting, (4) mistakes in recording or coding the data obtained, and (5) other errors of collection or processing, or in imputing for missing or inconsistent data. Coverage error has an effect on the accuracy of estimates for this survey to the extent that the administrative records system, which forms the basis of our survey universe frame, does not contain all legal businesses. A major source of nonsampling error in the published estimates is due to the need to impute data for nonrespondents and for late and inconsistent reports. For all kinds of businesses combined, imputed data amount to about 26 percent of the total monthly wholesale sales estimates and 28 percent of the total monthly wholesale inventories estimates.

Nonsampling errors also occur in complete censuses. Although no direct measures of these errors have been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data to minimize their influence.

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Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

SIC code	Kind of business	Sales					Inventories						
		1997		1996			1996	1997		1996			1996
		Feb.	Jan.	Dec.r	Nov.	Oct.	Jan.r	Feb.	Jan.	Dec.r	Nov.	Oct.	Jan.r
	<b>U.S. Total<sup>1</sup></b>	<b>0.909</b>	<b>0.961</b>	<b>0.984</b>	<b>0.975</b>	<b>1.085</b>	<b>0.965</b>	<b>1.014</b>	<b>1.023</b>	<b>1.004</b>	<b>1.010</b>	<b>1.007</b>	<b>1.023</b>
<b>50</b>	<b>Durable</b>	<b>0.901</b>	<b>0.936</b>	<b>0.982</b>	<b>0.978</b>	<b>1.098</b>	<b>0.942</b>	<b>1.003</b>	<b>1.001</b>	<b>0.987</b>	<b>0.995</b>	<b>0.998</b>	<b>1.000</b>
501	Automotive	0.908	0.911	0.995	0.983	1.072	0.917	1.045	1.016	0.978	1.018	0.998	1.016
502	Furniture	0.883	0.894	0.972	1.015	1.133	0.893	0.987	0.979	0.971	0.989	0.996	0.980
503	Lumber	0.839	0.877	0.859	0.965	1.122	0.886	1.017	0.998	0.986	0.963	0.955	0.999
504	Prof. equip.	0.905	0.996	1.049	0.959	1.069	0.988	0.988	1.016	1.010	1.004	1.008	1.016
505	Metals	0.928	0.990	0.917	0.920	1.073	0.995	0.989	1.012	1.015	0.972	0.989	1.012
506	Electrical	0.907	0.948	0.960	0.998	1.134	0.950	0.997	0.998	0.982	0.992	0.991	0.997
507	Hardw are	0.864	0.899	0.941	0.987	1.131	0.905	0.997	0.980	0.991	0.987	1.001	0.981
508	Machinery	0.910	0.937	0.994	0.933	1.061	0.957	1.005	0.992	0.985	0.994	0.999	0.992
509	Other Durable	0.870	0.901	1.017	1.070	1.173	0.900	0.968	0.982	0.972	0.997	1.028	0.982
<b>51</b>	<b>Nondurable</b>	<b>0.918</b>	<b>0.991</b>	<b>0.991</b>	<b>0.974</b>	<b>1.070</b>	<b>0.991</b>	<b>1.033</b>	<b>1.061</b>	<b>1.032</b>	<b>1.033</b>	<b>1.021</b>	<b>1.060</b>
511	Paper	0.928	1.032	0.990	0.963	1.083	1.029	1.002	1.026	1.022	1.018	1.003	1.026
512	Drugs	0.916	1.067	1.033	0.983	1.113	1.076	1.031	1.075	1.027	1.010	1.021	1.077
513	Apparel	0.976	0.920	0.798	0.959	1.214	0.911	1.005	1.044	1.015	0.965	0.990	1.043
514	Groceries	0.900	0.998	1.005	1.000	1.060	0.997	0.973	1.006	1.020	1.034	1.053	1.006
515	Farm-products	0.963	1.127	1.055	0.976	1.073	1.124	1.230	1.304	1.225	1.212	1.056	1.304
516	Chemicals	0.938	0.982	0.924	0.942	1.028	0.988	1.020	0.981	0.992	0.976	0.978	0.982
517	Petroleum	0.945	1.025	1.013	0.979	1.053	1.024	0.974	0.965	1.021	1.017	1.034	0.965
518	Alcohol	0.799	0.817	1.103	1.036	1.081	0.800	0.962	0.937	0.921	1.070	1.100	0.938
519	Other Nondur.	0.893	0.885	0.964	0.907	1.022	0.882	1.050	1.052	0.984	1.000	0.984	1.051



r Revised

<sup>1</sup> Adjusted sales and inventories data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimates.